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# LETTERS

## Controversy about Controversy

To the Editor of the *Bulletin*:

It is with reluctance that I write a letter criticizing anything in your journal, but I have been considerably annoyed by the letter printed in the last issue from the correspondent who signs himself "Pugnax."

It seems to me that his attitude is harmful and that you have done the *Bulletin* a disfavor by printing his sniping criticisms. He has the attitude that it is impossible for as intelligent a group of men as our Alumni and Faculty to be able to work in harmony, but rather that the articles which have appeared in your pages describing the flourishing progress of the School are merely a cloak for discord and disorder. He has adopted the most effective mechanism of communist propaganda to attack what he should be proud to defend. His demands that the *Bulletin* rush headlong into controversial issues of medical politics, ethics, and economics are either ridiculously puerile or shrewdly aimed at bringing about the self-destruction of the paper.

Most of the Alumni like myself read the *Bulletin* to learn what is going on at the Medical School, and what our friends and acquaintances are doing. Many of the articles, like Dean Berry's report in the last issue, are not only intensely interesting but are bound to affect much of the financial thought in other medical schools. The introduction of papers written in a lighter vein has been most fortunate because they have been so well written and entertaining. There is no cause for the *Bulletin* to enter the forensic arena on either side of any issue which can stir up and antagonize a segment of the Alumni and eventually lead to their repudiation of the journal or even their becoming disgusted with the Medical School. If "Pugnax" wants an H. L. Mencken type of paper, he should seek it elsewhere and leave the *Bulletin* to pursue its excellent course undisturbed.

Personally, I regard his suggestions as ASSININE.

"IRRITATED," '35

## More on the Curriculum

To the Editor of the *Bulletin*:

Congratulations on the publication, in your April issue, of Dr. Mark Altschule's interesting suggestions for the improvement of the Medical School curriculum. As a psychologist on the Medical School staff who is very much interested in the psychological aspects

of medical research and teaching, I heartily endorse his proposals. Herewith is a reply to the contrary views expressed by Dr. Culver:

1. If the "socio-psychologic aspects of medical education and research are in a . . . vigorous state of growth," they have not yet shed the weighty seed-pod that halts their climb to light. To my knowledge, only four behavioral scientists are working full time for Harvard Medical School. (Dean Berry's office disclosed in May, 1955 that there were four behavioral scientists receiving full-time compensation from Harvard Medical School. Three of these were designated as "in training.") If the experience of the other three parallels my own, their salaries depend upon the continuation of government grants, and they have only seen medical students at a distance while at lunch.

2. The methods and data of the behavioral sciences have never been accepted by an older academic discipline without resistance. "Two or three behavioral scientists" appointed to faculty rank would be unable to "coordinate teaching and research efforts . . . throughout the medical school" unless they were permitted unimpeded direct contact with the students. For are not the students, above all others in our school, the most able and most eager to learn?

3. The clearest contribution of the behavioral sciences has been the proof that the laws of human and animal be-

havior cannot be approached by uncontrolled personal experience and that the awareness of these laws is not an "instinctive attribute" of the human being. There is little evidence that the young physician is any exception.

This letter is not meant as a criticism of what Harvard has done so far; I am sure that we four are glad of the opportunity to work in a medical setting. It is intended, however, to correct Dr. Culver's implication that such support and such numbers are adequate.

OGDEN R. LINDSLEY  
*Research Fellow in Psychology*  
*Harvard Medical School*

## Fenichel a Non-Smoker

To the Editor of the *Bulletin*:

I am just reading (Dr. Knapp's) most amusing report on smoking and want to inform you that Otto Fenichel did not smoke (did not drink either, read philosophy and poetry and went constantly on hikes). This is not based on hearsay, but on many years of close observation in our long lasting friendship. He was one of the people who never said "Please don't smoke," but he always opened a window instead.

GRETE BIBRING, M.D.  
*Assistant Professor of Psychiatry*  
*Harvard Medical School*

*Editor's Note:* Dr. Knapp herewith offers his apologies to Otto Fenichel, and thanks Dr. Bibring for her correction.

## DR. TRIMBLE HONORED AT RECEPTION

A large gathering of former students and friends met in the Faculty Room on the afternoon of June 15 to honor Dr. Harry S. Trimble, the retiring Edward S. Wood Assistant Professor of Biological Chemistry.

Dean Berry, in opening the brief ceremonies, gave Dr. Trimble the Verner Etching of the School, proffering the gift "on behalf of the generations of students you have taught. This is a picture of the home in which you have lived for 33 years, from all your colleagues who have lived here the better because of your tenancy."

Dr. A. Baird Hastings of the department of biological chemistry presented Dr. Trimble with an engraved silver traveling clock "from your colleagues and friends." In his brief talk, Dr. Hastings paid tribute to

Dr. Trimble's "patience, gentleness, unselfishness and understanding," and added, "I want to officially express to you the gratitude we all feel for your long and continuous contributions to all of the activities of the department, and for the devoted way in which you have held firm to those ideals and standards that strengthen Harvard University."

As professor of chemistry in the School at the turn of the century, Edward S. Wood epitomized the merger of the sciences and the clinic out of which modern science has flowed. Dr. Trimble is an eminently appropriate first incumbent of the professorship established in Dr. Wood's name, for as a senior and well-loved professor, he has carried on in the tradition of excellence so vital to the strength of the School.





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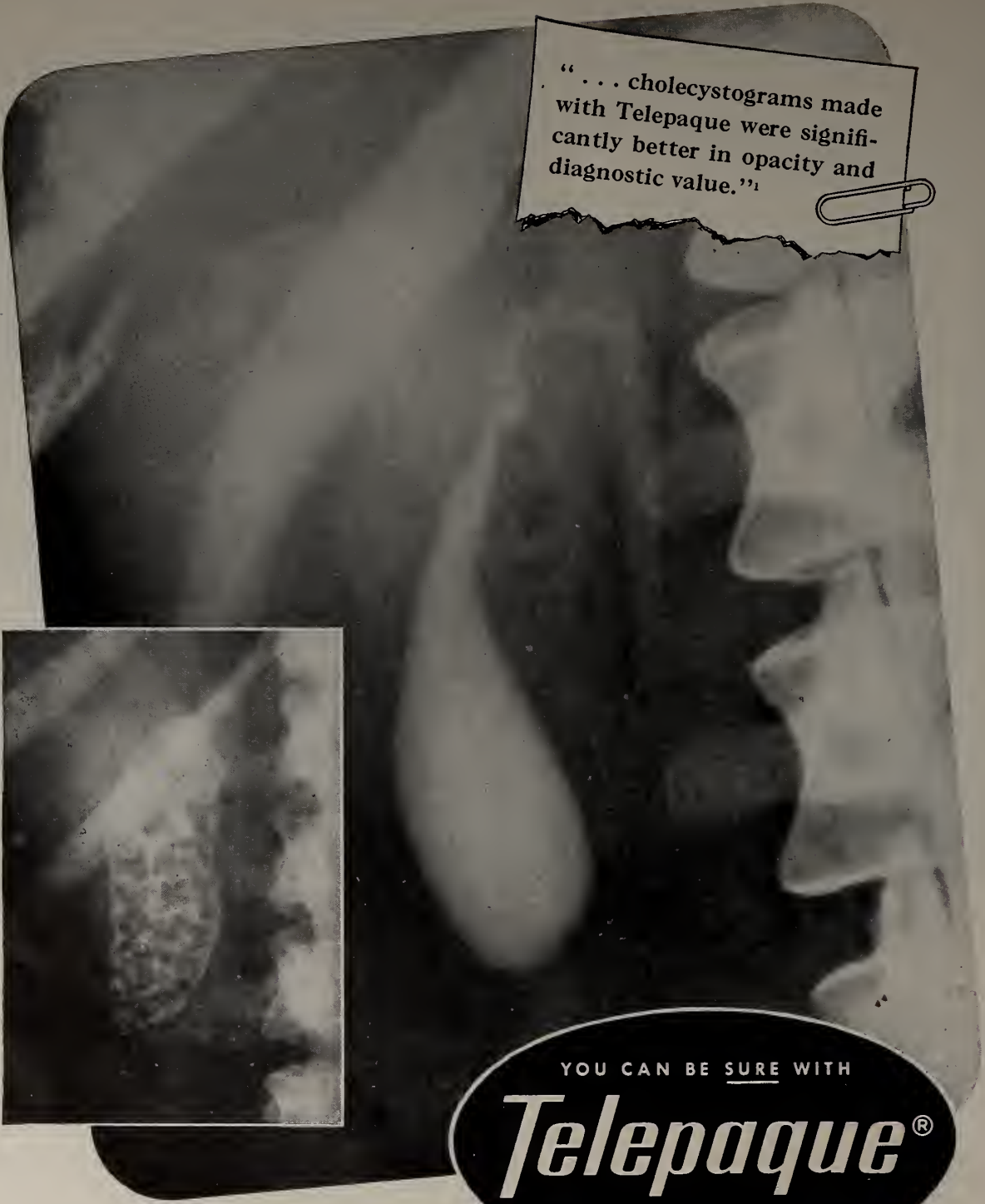
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<sup>1</sup> Abel, M.S., Lomhoff, I.L., and Garcia, C.V.: *Permanente Found. Med. Bull.*, 10:95, Aug., 1952.

<sup>2</sup> Lowman, R.M., and Stanley, H.W.: *Connecticut Med. Jour.*, 16:591, Aug., 1952

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# HARVARD MEDICAL ALUMNI BULLETIN

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NO. 4

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Dr. Trimble Honored . . . . .	2
Emulation and Disputation: Quo Animo . . . . .	7
Medical Aspects of Travel in Outer Space . . . . .	10
Alumni Day and Class Day . . . . .	14
Reunions . . . . .	16
Class Day in Pictures . . . . .	24
Inside H.M.S.—“1955 Class History Address” . . . . .	26
Internships, Class of 1955 . . . . .	28
Postgraduate Courses Offered for 1955-56 . . . . .	30
Honors . . . . .	31
Unveiling of Portrait of Professor Drinker . . . . .	32
Gay Lecture . . . . .	32
Necrology . . . . .	33
Alumni Notes . . . . .	33

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# *Emulation and Disputation: Quo Animo*

Being an Account of the Boylston Society of Harvard University\*

*Edward H. Kass, M.D.*

ASSISTANT PROFESSOR OF MEDICINE

"There is only one thing better than tradition, and that is the original and eternal life out of which all tradition takes its rise."—Lowell.

The first decade of the nineteenth century was full of excitement for New England. The fears that the radical rule of the Jeffersonian party would lead to ruin were largely calmed. Jefferson had refused a third term in office, and the government of his successor, James Madison, had demonstrated amply that there was no need for the busy New Englander to fear that his industry would go unrewarded. Although in the frontier areas talk of war with the British was increasing, Bostonians, who suffered the largest financial damage from the predacious British fleet, were least interested in such military adventures.

For Boston had acquired a mission. Its people had learned the value of rhetoric, had enjoyed the oratory at Faneuil Hall and had tasted the excitement that comes from a realization of purpose and common action. Anticipation was everywhere. Everyone was expected to be someone, and learning was to be the key to the realization of ambition. Numerous prophets preached the new gospel—great minds must be formed here—the intellectual life was the means for realization of life's greatest needs—learning and more learning

\* No attempt has been made to annotate these remarks. However, Dr. Mark Altschule's fine essay on the history of the Boylston Society has been of such value that failure to offer proper acknowledgment would be a grave omission.

were the touchstones of character.

On the other side of the river, Harvard College was the fount and the follower. Already considered in some quarters lax and dangerously liberal, and in others stuffily colonial, it was supplying to the scions of Boston's leading families an intense education in the classics, a sense of public duty, a rigidly intellectual view of behavior, and a consuming ambition to be worthy of having one's likeness encased in marble or bronze.

It is scarcely surprising that in such an environment, a medical school that met in odd corners of Harvard College, away from the city where were to be found the physicians and the patients, was considered less than ideal by some of its faculty.

By 1810, when the medical school was some 28 years old, a youthful and energetic faculty succeeded, despite formidable opposition, in moving the school to Boston. The Department of Clinical Medicine under James Jackson, was founded, and arrangements were made with the Honorable Board of Overseers of the Poor to place the hospital of the Almshouse under the supervision of the Faculty of Medicine. This seems to have been the first teaching hospital agreement for the medical school. The advantages to patient and to school of such an arrangement were no less evident at that time than now. The appeal for funds to build the Massachusetts General Hospital followed within the year.

Naturally, the significance of the new location and the changes in the faculty was not lost to the students,

and the Boylston Medical Society of Harvard University was formed and had its first meeting on January 6, 1811, with John Collins Warren as its first president and James Jackson as its second.

The articles of incorporation state that the Society was formed "for the purpose of promoting emulation and inquiry among the students at the medical school connected with Harvard University." The statement is deceptively simple and complete. Almost a century and a half later, the dominant intellectual credo of contemporary society asserted itself—the purpose of the Society no longer recognizes emulation as a worthy stimulus to good thinking. The Society now functions "to provoke earnest inquiry into and free discussion of the traditions, the science, the art and the practice of medicine."

The means for choosing its name, as well as the history of the early years of the Society, are not well documented. Zabdiel Boylston Adams was one of the founders, but his role is not clear. Zabdiel Boylston, for whom he was named, was one of the earliest advocates of inoculation against smallpox, and his nephew, Ward, who adopted the Boylston surname, provided in his will for the Boylston prizes.

The meetings, in the early years, were conducted in the classic tradition, with emphasis on scholarship and organized disputation. The members took turns reading lengthy theses on subjects of their own choosing. Following this, a different subject, decided upon at the previous meeting and sometimes but not



Sumner Zacks

*The audience is attentive—usually*

necessarily related to the previous thesis, was debated. Four to six previously appointed disputants upheld differing points of view in the classic adversarial tradition of the debating hall, and a final decision was rendered by vote.

The early disputations ranged from the value of the study of pathologic anatomy, or the use of the stethoscope, to "Does the Contractility of the Involuntary Muscles Depend on the Nervous Sensibility." In 1829 the dissertations included "Morbid Changes Produced by Intemperance," "On Sympathy," "Adhesive Inflammation," "Helminths," "Vegetable Nutrition," "Physiology and Pathology of Mucous Membranes," etc. It seems evident that the dissertations satisfied the need for learning but that the disputations were the joys of the evenings. For example, on December 18, 1829, a Mr. Jarvis was elected to be chairman but declined, "as he was on the list of disputants and preferred making a speech." Mr. Jarvis evidently had assessed his talents well; the secretary records that the discussion, which was on the *modus operandi* of emetics, "was conducted with temperance and was suddenly and satisfactorily

closed, without any of those multiplied and unmeaning rejoinders which ordinarily ensue, by a happy *jeu d'esprit* from Mr. Jarvis." Unfortunately, Mr. Jarvis' inspiration was not recorded for posterity to enjoy.

Although most of the subjects dealt with timely problems in medical practice, there was a paper on October 21, 1830 on the "Advantages of the Habit of Composition and Debate to the Medical Student." The paper is unfortunately not recorded, and reprints are not available.

The authors and the subjects of the prize papers are not recorded during the early years, but it is a safe assumption that the prize papers were representative of the wide range of subjects that were discussed at the regular meetings.

In an atmosphere of bustling, expanding industry, it is not surprising that the learned students of medicine occasionally developed other skills. In 1831 the funds of the Boylston bequest were invested under such favorable circumstances that it was possible to add a second prize award.

There is every evidence that Puritanism did not always rule the social behavior of the members.

Many of the pages of the early records are spotted and a few of the spots have helpfully been labeled "beer." In 1833, Dr. John C. Howard's presidential address was entitled "The Influence of Medicine on Social Life." Mr. Shurtleff, the secretary, records that at the conclusion of the address, the members "repaired to the President's house . . . and were regaled by the collation which the President with his usual liberality had provided."

There were some realistic problems and difficulties facing the Society in those days, but no lack of sound thinking. On December 17, 1834, it was recorded that "on account of the coldness of the apartment it was voted to meet hereafter on Thursday evening as two lectures are delivered in the room on the afternoon of that day and there would be more prospect of a comfortable state of the atmosphere."

Soul-searching, thoughtful contemplation of the future, elegantly staged hoaxes, and adventures in sophistry were inevitable fare in a society devoted to intellectual gymnastics. In 1836, a Mr. Bicknell delivered a discourse on the "Intricacies, Doubts, and Obscurities of Medicine" in which, as the secretary records it, Mr. Bicknell poses several of the dilemmas of a medical student. "If he would treat of Inflammation, what is it? No one can tell—If he would treat of Fever, It is unfortunately connected with Inflammation, & this we do not understand—If he would take up Peritonitis, it is Inflammation of the Peritoneum—and so with almost all Diseases & even all subjects connected with medicine.

"But into this thick darkness, light was evidently breaking, & a greater degree of certainty was promised for some future day—. In the meantime there was cause for encouragement of confidence that merit would be appreciated & rewarded. But considering the peculiar state of medical science at present & his own peculiar incapacities he hoped to be excused from giving a Dissertation upon any particular subject."

During the next few years the  
*Harvard Medical Alumni Bulletin*



Society evidently ceased to meet regularly, save for occasional periods of stirring when a vigorous individual assumed leadership and revived its activities.

Medical education had changed its character by the middle of the 19th century. The schismatic politics, war, economic problems of great severity and many changes in the society of the times were not conducive to study or to academic achievement. Professorial salaries in the medical school were made up largely out of fees paid directly to professors by their students. It was not until President Eliot undertook his reform of Harvard that the Medical School was put on a sound academic level. Promptly the Boylston Society emerged from dormancy and has flourished ever since.

Of inestimable value to those who wish to trace some of the changes in medical thinking has been the collection, apparently under the stimulus of Doctors Elliott Cutler and Reginald Fitz, of all existing Boylston Society records. These are an extraordinary source of material.

It would be expected that many members of the Boylston Society followed academic careers. Of great interest is the opportunity to study the topics that many prominent physicians presented as students and to compare these with the later development of their authors. Many papers give clear evidence that their authors already had decided on their fields of major interest, or were stimulated into them by the preparation of papers like those read to the Boylston Society. For example, C. H. Fiske spoke in 1913 on "The Metabolism of Nitrogen in Pregnancy and Allied Conditions," and the presentation opens with an apology that a subject dealing with metabolism should be presented to persons interested in clinical medicine. H. C. Solomon gave his paper that year on Feeble-mindedness and opened with some remarks that have a familiar sound. "To the subject of feeble-mindedness the medical profession has paid but little attention, often with most unfortunate results to the family and

child, and also the community at large." The paper closes by calling attention to the existence of national and state societies for mental hygiene. There is also an invitation to attend a conference on this problem at the Tremont Temple!

On the other hand, Francis G. Blake wrote in 1912 on the symptomatology of brain tumor. As one glances through other years, E. B. Dunphy wrote on "Etiology of Gall Stones" and J. M. Baty on "Migraine," but R. H. Sweet on "Carcinoma of the Rectum" and C. E. Forkner on "Studies on Living Blood Cells."

The role of the Society in augmenting the education of its members is vividly displayed in a paper by G. E. Prather in 1924. There is little here to permit anticipation of Dr. Prather's interest in urology—the paper deals with coronary thrombosis. Its opening paragraph is as follows: "Some months ago, Dr. Burton Hamilton described the syndrome of coronary thrombosis to me, and pointed out that it is sometimes confused with abdominal conditions. Upon turning to Osler's textbook I discovered that one paragraph had been devoted to this subject, and upon consulting a few of the systems of medicine, to my surprise their discussions were as brief as Osler's."

The detailed functioning of the Society is of some interest, and may be related to its success. The President is a member of the Faculty and is elected each year by the student members. The student officers are vice-president (who presides at the business meetings), the secretary, treasurer and various committee chairmen. Three trustees are elected annually; these are physicians in Boston, usually but not necessarily faculty members, and there is a prize committee to review the dissertations and present the first and second prizes.

The choice of members is entirely managed by the students. Early in the fourth year, a membership committee, chosen the preceding year, selects a slate of five members of the

third year class. Any member of the Society may make recommendations to the membership committee, and there are means for adding to the slate. The five members of the third year class chosen by the membership of the Society now join the membership committee and choose ten more of their classmates. These fifteen third year members become the Membership Committee and continue to propose candidates until 25 per cent of the class has been elected. Only Harvard Medical students in the third year are eligible for new membership. A member may not miss more than four consecutive meetings without a satisfactory excuse. Each member, during his fourth year, is expected to read a paper. A student who wishes his dissertation to be considered for the prizes must present it to the President before a certain time, with the stipulation that his paper carry on it a fictitious name, and be accompanied by a sealed letter bearing the same name on its cover, but containing his true name. The envelopes of the two prize essays are opened at the time that the prizes are awarded—the remaining sealed envelopes are burned, the pyre being an important part of the ceremonial attending the annual banquet of the Society.

These are the mechanical aspects of the Society. They are not without potential defects, but these are less critical than the impact of the Society on the functioning of the school. The quality of the papers is remarkably good and the opportunity for prolonged discussion provides a stimulus to alert listening. Here is the place to test thinking as well as thoughts, and, here is also an unparalleled opportunity to determine student attitudes, and, indirectly, many faculty attitudes.

To many of us who are not Alumni of the Harvard Medical School, the Boylston Medical Society has been a unique experience. It is difficult to escape the conclusion that a great deal of Harvard's strength lies in this organization and in the things it represents in the educational process.

# Travel in Outer Space

Emanuel M. Roth, '54

*Editor's Note:* This address was awarded Second Prize in the 1954 Boylston Medical Society competition. The medical aspects of travel in outer space are perhaps as far removed from the Boylston dissertations of 1829 on "Morbidity Changes Produced by Intemperance" as is the apogee of an elliptical orbit from its perigee. However, medical science grows apace, and with it the Boylston essay. Certainly this fascinating and provocative discussion by Dr. Roth well serves "the purpose of promoting emulation and inquiry among the students at the Medical School connected with Harvard University." Today the papers presented at the Boylston Society by third and fourth year Harvard medical students compare favorably with the majority of scientific essays by their more distinguished and experienced elders.

Modern advances in the fields of physics, astronomy, aeronautics, and medicine have reached a point where the major problems of manned interplanetary flight may be concretely outlined. Indeed, space medicine today appears to be in that state of development comparable to the frontier of aviation medicine in the 1912 era. I shall briefly review some basic problems of rocket physics and then discuss the physiological stresses to be encountered and solved in high speed rocket travel.

The basic requirement of a space vehicle is that it be able to attain an upward acceleration long enough to acquire an altitude and velocity great enough at motor cutoff to provide the vehicle with satellite status. A satellite status such as the moon has to the earth, or a planet to the sun, is one in which the rotating body travels around its partner in an elliptical Keplerian orbit. Its rotational velocity is such that the centrifugal component of this motion just counteracts the force of gravity

pulling it towards the body at one of the foci of the elliptical orbit. At the apogee, or furthestmost point of the ellipse from the mother body, the velocity is at a minimum as is the gravitational force. As the satellite approaches the perigee, the velocity increases as does the gravitational force. Both centrifugal and gravitational forces tend to counteract one another and the satellite coasts out again to the apogee.

It has been calculated that a rocket the size of a German V-2 could achieve satellite status if it attained, at an altitude of 15 to 20 miles above the earth, a velocity at motor cutoff of 23,000 ft./sec. or 4 mi./sec. The present V-2 has a terminal velocity at cutoff of only  $\frac{1}{4}$  this value and so must complete its path as a parabola back to earth rather than attain satellite status. The higher one goes, the smaller an escape velocity is needed, and since less atmospheric drag is encountered, the longer the duration of flight. To completely escape from the earth's gravitational atmospheric effects, a 7 mi./sec. velocity need be attained at motor cutoff. The maximum altitude of a 2 stage WAC Corporal - V-2 rocket is 240 miles, but velocity at cutoff is not enough for satellite status. At present there are plans for a multiple stage rocket which will be large enough to utilize present-day fuels in attaining satellite status for the last stage. What the utilization of nuclear energy has to offer is beyond the scope of present-day thinking.

As will be discussed, the ship and all its contents, while traveling at a constant velocity in this orbit, are in a state of zero gravity. It requires no energy output, other than that for

original escape acceleration, to keep it in its orbit. Addition of new accelerative force within the orbit would cause the ship to jump out to a new orbit which could well encounter the orbit of another planet. What are some of the physiological stresses to be encountered in this period of escape and within the prolonged orbits of outer space?

## I. Linear Acceleration

That velocity at motor cutoff needed to escape from the gravitational effects of the earth requires the following acceleration-duration combinations:

Physiologically effective acceleration in g units	Duration of acceleration
3	9 min. 31 sec.
4	6 " 21 "
5	4 " 45 "
6	3 " 48 "
7	3 " 10 "
10	2 " 6 "

The smaller g values are physiologically sound, though mechanically costly from a fuel standpoint. There is a physiological limit to accelerations longer than 44 seconds and so the human factor looms large in take-off problems.

Positive (direction of force from head to toe) g acceleration has been well studied in present-day aviation problems and involves pooling of blood on the lower extremities with subsequent drop in cardiac output, cerebral ischemia, and shock. Man's tolerance has been set at the 5 g level for 5 seconds within limits of reversibility. Negative (toe to head) g acceleration produces petechial hemorrhages in all extra cerebral structure of the upper half of the body.



Nasal sinuses, eyelids, facial muscles, esophagus, and lungs are affected. The CSF, however, rises and protects the cerebral vessels from damage by negative g's. The sclerae protect the retinal vessels. The "redouts" so frequently reported are thought to be caused by engorgement of the vessels of the conjunctival sac which is drawn over the pupil in the negative g state. Shifts of blood from lower extremities increase venous return, but increased pressure on the carotid sinuses causes a bradycardia instead of the tachycardia needed to handle this excessive load. Cardiac irregularities and a-systoles may occur. Changes in pulmonary vascular pressures have caused apnea, hemorrhages, and anoxic states. Anoxia, a-systoles, and stagnation of blood in cerebral vessels have led to loss of consciousness and mental aberrations in relatively brief runs.

Recent studies in the Aero-Med Laboratory in Ohio have attempted to determine optimum body positioning for rocket takeoff. In the supine position, 7 g's for 3 min. 10 sec. was maximum tolerable level. Severe substernal pains and dyspnea limited the tolerance time. Modification of position to the elevated head and knee position of semi-supine posture increased tolerance to 8 g's for 2 min. 40 sec. Some could tolerate up to 10 g's, the limiting symptoms being dyspnea, epigastric pain, and swallowing trouble. Man is therefore capable of resisting accelerative forces required for escape velocity outlined above. It also appears he will first rocket from earth in the beach-chair position.

At escape velocity of 7 mi./sec. a barely perceptible turn of only two degrees would produce an angular accelerative force of 20 g's with a turn radius of 400 miles. At that acceleration, periods of greater than 2/10 sec. can rupture intervertebral discs. How the severe 20 g stress expected at escape velocity is to be met will be an interesting problem for the aero-physiologists.

## II. Heating Effects

The second major problem is that

of heating effects. The steel nose of the Viking rocket in ascending through only 266 seconds of atmosphere reached a temperature of 240 degrees C. Refrigeration devices will have to loom large during the escape from the atmosphere. Were the devices of refrigeration to fail, an unprotected man would have less than 10 seconds at 240 degrees centigrade to repair the damage. It will be of interest to add that if a crewman were to bail out at high altitudes, he would attain speeds prior to effective parachute levels at 200 km. altitude, which would cause both his clothing and parachute to ignite. Emergency bailouts will certainly tax the imaginations of rocket designers and physiologists.

As one climbs higher than 130 km. and into outer space, outside temperatures will play a great role. The hull of the ship will in due time assume equilibrium temperatures under the influence of direct solar rays, rays reflected from earth, atmospheric water vapor, and thermal emission of the hull. Atmospheres of the planets vary from -220 degrees C. on Pluto to 400 degrees C. on Mercury. Both refrigeration and heating devices would be required to keep man within his narrow island of temperature tolerance.

## III. Gravity-free States

A third problem arising as a result of the motion of the rocket is the gravity-free state. The gravitational forces which act on each individual molecule of the body are eliminated by the forces of inertia as soon as the body moves in a Keplerian orbit of a free satellite in space. Grauer and Haber were the first to suggest that the conflict between the normal visual observations and the changed impulses from the non-functioning, gravity-controlled otolithic organ of the inner ear might lead to disturbances in orientation and performance, or even to severe motion sickness. Jet pilots who experienced 15 seconds of gravity-free time when riding the peak of a vertical climb and sudden-motor-cutoff parabolic trajectory recorded no ill effects if they

were strapped to seats and had a point of visual reference. It was the opinion of the pilots that blind-folding and freedom from straps would have produced severe disorientation. In spite of the absence of hydrostatic blood pressure during these 15-second runs, there were no unusual changes in cardiac rate, rhythm, or EKG tracings.

At White Sands, New Mexico, animal-manned rockets have been used in studies of gravity-free states. Complex physiological data have been televised and telemetered during the 2 to 3 minutes of the gravity-free states at the 400,000-foot apogees. Monkeys in all positions showed no changes in pulse, venous pressure, EKG's or respirations. The small drops in B.P. were attributed to poor temperature control in the rocket heads. Normal mice placed in rotating wire drums showed no gross muscular coordination defects in gravity-free states, but did appear disoriented and confused. They appeared as much at home in the upright as in the inverted position and appeared satisfied as long as tactile senses were satisfied. A rubber ball and water floated in mid-air within the drums, thus proving that a gravity-free state existed while the observations were made. It is of interest that previously labyrinthectomized mice did far better than did normals in the rotating drums. They were apparently acclimated to lack of stimulation from their otolithic centers. Violent movements made by the animals were probably caused by the gross disproportion between the effort exerted for a movement and the energy required under zero gravity.

Weightless objects floating around a cabin appear to be a problem for future engineers. Can human orientation be re-channeled to respond properly to this environment? The visual system of man has been able to perform an orientation during instrument flight in the turbulence of storms, at a time when the somatic indicators oriented to gravitational factors and lag-ridden flight instruments were giving false information

of position and direction. Through adaptation and learning, the rocket pilot should be able to integrate the aberrant data and perform his task in gravity-free states. In view of the fantastic speeds, it seems reasonable to assume that our human pilot, except for landing and take-off procedures, will probably be relegated to a minor position in a chain of automatic controls.

#### IV. *Extra-terrestrial Conditions*

Another group of problems stems from the physical characteristics of the atmosphere itself. Buettner has coined a new term for the region in which the functional effects of the atmosphere begin to cease. The aero-pause, as he has termed it, presents the following physiological problems:

##### A. *Respiration*

Above 4 km. or 13,000 feet, the decrease of oxygen has such a strong psycho-physical effect that we speak of this region as the zone of hypoxia. At 52,000 feet, the ambient  $O_2$  pressure is 15 mm. of Hg and man breathing pure  $O_2$  at this pressure can remain conscious only 15 seconds. At 18 km., the alveolar  $O_2$  is near zero, and each of the alveoli is occupied by  $CO_2$  and  $H_2O$ . At this "infinite altitude," as it is biologically defined, traces of  $O_2$  cannot enter the alveoli and man suffocates in his own water vapor. A flame will be extinguished in pure oxygen at the ambient pressure of 82,000 feet. In addition, the zone of 65- to 98,000 feet is enriched by ozone which results from the bombardment of oxygen molecules by ultra-violet light. Only through use of catalytic materials in the air compressors could ambient air of this region be used because ozone is toxic at 1 ppm. At 80 to 100 km. altitude, oxygen molecules dissociate under cosmic ray bombardment to free oxygen. It is the red auroral after-glow which results from the recombination of this atomic oxygen.

The anoxic state dominates inter-planetary space and there is no free oxygen in the atmospheres of the planets in our solar system. The

outer planets, Pluto to Jupiter, have recently been shown to contain only hydrogen, helium, methane, ammonia, and possibly water in the frozen state. Mars has free  $H_2O$  vapor as well as nitrogen, argon, and  $CO_2$ ; an atmosphere with an extremely low free oxygen potential. Man will therefore require supplementary oxygen on all the planets.

Above 30,000 feet, man requires oxygen under positive pressure masks. The new masks are able to supply positive pressures of 60 mm. Hg. However, only 20 to 30 minutes of 40 mm. Hg breathing is possible at the simulated atmosphere of 38,000 feet. The cold sweats and fainting are attributed to the shock-like state produced by constantly elevated intrathoracic pressures and subsequent decreased venous return, with distention of leg veins. Counter-pressure of gravity suits on limbs will increase tolerance to periods of 30 minutes at simulated altitudes of 60,000 feet. The use of such equipment is one way of overcoming the acute hypoxic states developing as a result of sudden cabin decompression above the troposphere.

##### B. *Dysbarism*

Cabin decompression by meteorites is of prime importance in outer space. Whipple at the Department of Astronomy at Harvard has studied this problem and has concluded the following:

Below the altitudes of 80 to 100 km., the blanketing effect of the earth's atmosphere in vaporizing meteors reduced the hazards from meteoritic penetration to negligible values even for flights of many months' duration. At altitudes of 100 to 120 kms. (62.1 to 74.6 miles), the probability of penetration for a spherical vehicle 3 meters in diameter and aluminum skin thickness of .32 cm. is only one in 2000 per day. Only for prolonged trips in this region does danger from perforation become significant. Avoidance of orbits of the comet and meteor streams between Jupiter and Mars will add a safety factor to this trip. Even if a rocketship were to be

punctured, a time lag prior to complete decompression would offer occupants time to don emergency equipment. Haber has calculated that through an orifice of 1  $cm^2$  per  $m^3$  of cabin volume, decrease of normal air pressure to 3000 mm. Hg (30 mm. Hg of alveolar oxygen) consumes at least 9 seconds.

What changes are to be expected from this violent decompression? At 63,000 feet the boiling point of body fluids is about 37 degrees C. Since this is body temperature, sudden decompression would cause inflation of the skin by the boiling body fluids. The problem of a decompressive aero-embolism starts at 23,000 feet. The bends and chokes of caisson disease caused by nitrogen and oxygen bubbles in the blood have been thoroughly studied by Dr. John F. Fulton (H.M.S. '27). The most critical changes leading to shock occur in the lungs as a result of capillary and alveolar rupture, or reflex drops in blood pressure through stretch receptors in the parenchyma. The new Air Force partial pressure emergency suits can inflate with any drop in ambient pressure and aid in combatting anoxia, the effects of gravity and positive pressure breathing. They also act to reduce the lung damage and reflex shock of violent decompression.

The final problem raised by dysbarism involves cabin pressurization. The cold, low-density "air" in space would require use of pumps and generators—prohibitive from a technical point of view. The only solution would be bottled or artificially generated air within the cabin. Since the carbon dioxide concentrations and the toxic and inflammable products of flatus must also be delicately controlled during prolonged trips through space, the methods of present-day submarine engineering will have to be applied to rocket problems.

##### C. *Radiation*

Radiation, even in the optical spectrum, presents a problem in space travel. With the gradual rarefaction of air and resulting decrease in scat-



tering of visible light, the blue scenery of our troposphere turns to black. The loss of horizon perception has been reported by night-fighter pilots at low altitudes. High altitudes, decreasing light intensities, and anoxia exaggerate this effect and will complicate ground approached under visual control. Increasing altitude also brings about constancy of contrast conditions, independent of viewing distance. With increase in altitude, there is increase in solar illumination, making viewing of objects rather difficult. Contrast between sunlit patches and darker cabin interiors will also require use of light-diffusing panels and other light-shielding devices.

The ultra-violet radiation problem merits brief mention. Most of the erythema-producing rays are absorbed out in the ozonosphere at 82,000 feet. Above this layer, ultra-violet radiation displays its full intensity. Since the hull of a ship protects from these rays, it should offer no problem to crew members. Alteration in the transparency of windows will offer some problem to the engineers.

The final problem, and probably the most interesting, is that of cosmic radiation. The rays themselves are positively charged nuclei of atomic numbers below those of iron. The distribution resembles the composition of elements in outer space. Nuclear collisions in space cause decreases in nuclear charge as these particles approach earth. The energy of these particles is tremendous, the lowest being one billion electron volts and the highest, that of iron, in the range of 100 BEV's. In contrast to alpha and beta rays, which lose their energy by excitation and ionization, cosmic rays leave their energy dissipated in the form of nuclear collisions. These leave their imprints in the form of cloud chamber stars. The stars contain the whole spectrum of elementary particles plus recoil nuclei smaller than the original ray. The formation of stars eliminates most of the more dangerous particles. These star patterns extend all the way to sea level, but are 1500 times

less frequent here than at the top of our atmosphere. The sea level total radiation dosage of 0.1 millireps/day increases to a maximum of 15 mreps/day at 75,000 feet; then drops off suddenly and finally increases with increasing altitude. In this region of increased radiation, the primary heavy nuclei encounter increasing density of air and produce a maximal number of stars. In this transition zone, equilibrium is established between primary and secondary elementary particles. In the equatorial belt up to 50 degrees geomagnetic latitude, the magnetic field of the earth prevents biologically active low and high energy particles from reaching the earth in significant numbers. Rocket studies at the poles show that the rays do get through at higher latitudes. The distance of the safe area in equatorial zones equals 2.14 earth diameters of distance. These factors may play a role in the establishment of orbit patterns of satellites about the earth and suggest the use of electromagnetic shielding of rocket ships in outer space. The latter is of great importance when one realizes that the rocket ship itself acts as an absorber which increases the rate at which primaries are turned into biologically active ionizations.

The cosmic rays themselves originate in the sun and other stars. Their ground level intensity fluctuates with sun flares and spots. The biological effects of these rays presents an interesting problem. They can penetrate 9.5 cm. of tissue and produce  $4 \times 10^6$  ion pairs along a 9.5 micron path. The heavy core may be ten microns in diameter and the scatter electrons may end up a considerable distance from the track. The following is a photomontage of a heavy nuclear track and an adjusted microphotograph of rather important tissue. A direct hit by a single heavy particle has been shown to kill Artemia eggs exposed to it at an altitude of 98,000 feet. This is indeed a radiation effect quite unlike the others previously encountered. Speculations concerning effects on long exposure to these rays have been



*Path of a cosmic ray through a semiferous tubule.\**

advanced, but little experimental evidence is available to back them. Exposure of animal and tissue preparations to cosmic radiations in balloons and rockets, and to beams of the new heavy particle accelerators will answer many of these questions.

These fragments of knowledge are indeed a most general survey of the many physiological problems which surround space travel. Medical research must, therefore, be planned not only to solve the problems of existing air travel, but to keep up with the drawing boards of rocket designers and with the imaginations of future Jules Vernes. It would certainly be unwise to let human physiology thwart the success of a flawless interplanetary machine.

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\* Reprinted through the courtesy of the University of New Mexico Press and White, C. S. and Benson, O. D., *Physics and Medicine of the Upper Atmosphere*.

# Alumni Day and Class Day



*Photographs by Walter Fleischer*

More than 700 Alumni converged on the Longwood Quadrangle early on the chilly morning of May 27 for the Medical School's annual Alumni Day festivities. Even before the majority of these eager revelers assembled, however, the officers of the Alumni Association had set briskly about the business of the day. At a breakfast meeting in Vanderbilt Hall, the 1954-55 Council Members held their last gathering of the year, and subsequently adjourned to Amphitheater E to join the Alumni for the annual business meeting of the Association. Here retiring President Conrad Wesselhoeft, '11, presented the slate of officers for 1955-56, and the following were elected:

Joseph Wearn, '17, President  
George P. Denny, '13, President-elect  
Richard Capps, '31, Vice President  
James Jackson, '43A, Secretary  
John Brooks, '43B, Treasurer

The first two officers serve one-year terms, while the others will hold office for three years. ♦

Dr. Wesselhoeft announced that the three Council Members whose terms expire this spring, Sven Gunderesen, '29, Leland S. McKittrick, '18, and H. William Scott, '41, will be replaced by Gordon A. Donaldson, '35, Claude E. Forkner, '26, and Joseph Garland, '19. These men were elected by mail ballot in accordance with the stipulations of the Alumni Association Constitution.

The business completed, an overflow crowd of Alumni and friends turned their attention to the Alumni Day Symposium, at which William B. Castle, '21, presided.

Dr. Joseph C. Aub's "Elder Statesman's View on Research in Medicine" dealt with the many problems inherent in the development of superior research teams and facilities. In order to attract top scientists and assure them of prolonged support, collaboration between medical schools and hospitals is essential. The ever-in-



creasing need for funds to effect and solidify this co-operative venture can and must be answered if medicine is to continue its advance.

Dr. Dana Farnsworth discussed "Attitudes and Motivations in the Harvard Medical School Students." One opportunity for advancing the techniques of medical education that has not yet been tried is that of considering the students' own viewpoints. These, of course, are numerous and varied, but scrutiny shows that many are worth considering, and may result, if put into practice, in closer ties between students and faculty, and better sharing of those that already exist. To improve the School's educational offering will require considerable work, but it will bring about good results and will add to the enjoyment and professional growth of both students and faculty.

Dr. Robert Gross spoke on "Surgery for Atrial Septal Defects." He discussed several new surgical techniques for treatment of these disorders, and illustrated, with



*The President talks it over with Clarence E. Bryant and Fritz B. Talbot, both '05*



*Henry Howe, Hugh Montgomery, James Woodall, and William Storms, all of 1930*

slides, various methods which have been used with success at the Children's Medical Center.

For the benefit of future aspirants to the Nobel Prize, Dr. John Enders revealed "How to Pick a Smart Associate." He modestly denied having chosen his associates, comparing their situation, rather, with the romantic system of marriages which develop from propinquity. He did state, however, that while his young associates all impressed him, at the start, as being intelligent, none seemed to him "smart young men." If they had, he added, they would never have become his associates. Having dispensed with the assigned topic, Dr. Enders went on to discuss his current project, the isolation of the measles agent.

Dr. Thomas Weller preceded his talk on "Some of My Viral Friends" by saying, in reference to Dr. Enders' speech, that Dr. Enders may not be aware of the fact,

but his associates picked *him*. He then reported on his work with the Varicella-Herpes Zoster relationship, and the problem of latent viruses. The many exciting implications of the work being done now by his group, Dr. Enders' group and others indicate that an entirely new area may be opening up in virus research.

Dr. Joseph Garland, in a talk on "Some Accessory Factors in Medical Education," discussed the problems and pitfalls of postgraduate medical education, particu-



*Roger I. Lee, '05, and Arlie Bock, '15*



*Robert Palmer, William Wishard, George Saunders, and Jacob Holzman, all of 1925*

larly in its local habitat. The rudimentary Hippocratic City on the other side of the Fenway, composed in part of the facilities of The Boston Medical Library, the *New England Journal*, the *Journal of Bone & Joint Surgery*, the Postgraduate Institute, and the Massachusetts Medical Society, beckons to "that unfinished product, the physician" with offers of embellishments for the laurels of his medical acumen.

The *Bulletin* hopes to print a number of these talks in their entirety in future issues.

Alfred O. Ludwig, '30, President of the 25th Reunion Class, greeted the assemblage with some pertinent comments equating the Medical School with a fountain of eternal youth. If the unprecedented number of his classmates who returned for their reunion can be considered an indication of youthful exuberance, Dr. Ludwig may be right.

Dr. Berry introduced President Nathan M. Pusey, who expressed his pleasure at seeing so many Alumni present. The approaching new era, in which almost everyone will hold a college degree, will be most significant, said Mr. Pusey, because, united as alumni, these informed individuals can become exceedingly influential. It is therefore most heartening to see so large and enthusiastic number of Alumni return to Harvard Medical School.

By the time the Symposium was over, the sun saw fit to put in its first appearance of the day, so luncheon took place not only "under the tent," as advertised, but all over the Quadrangle. The reunion classes subsequently adjourned to various clubs and private homes for class dinners and pre- and post-prandial celebrations.

Many Alumni returned to the Quadrangle on Saturday morning, May 28, to join with members of the graduating class, their families and friends, in enjoying the Class Day exercises of H.M.S. 1955.

After greetings by Dr. Roy O. Greep, Dean of the School of Dental Medicine, and Lawrence C. Thum, President of the Class, Mitchell Rabkin delivered the Class History.

The Alumni Association Prize, a check for \$200, went to Roman W. DeSanctis of Tucson, Arizona, in recognition of his "broad interests, steadfastness of purpose, well balanced personality, and general competence," qualities that place him "among those best qualified to foster the student-alumni relationship." Lee G. Kendall, '30, representing the 25th reunion class, made the award.

Mark D. Altschule, '32, Assistant Clinical Professor of Medicine, was the seniors' choice to present the Class Day Address. His "A Presbyopic View of Medicine from a Lucite Tower," or "Lavendar and Old Lucite" adroitly mixed scholarly erudition with Altschule humor to keep the gathering on its intellectual toes.

Dr. George P. Berry lead the Class of 1955 in taking the Hippocratic Oath. In his valediction, Dean Berry recalled some words spoken by Thomas Henry Huxley on a similar occasion 85 years ago: "... the rung of a ladder was never meant to rest upon, but only to hold a man's foot long enough to enable him to put the other somewhat higher." He urged the members of the graduating class to consider the word "practice" in the phrase "the practice of medicine" to be the word "ministry"—and to make the ministry of medicine their pattern of life. He added, "If you do, you will never violate your innermost convictions and you will also have a happy professional life."



*Mr. Pusey chats with Joseph Aub, '14*



# Reunions

## FIFTIETH REUNION

Our Class being the first that required a degree from a college to enter the School, the number admitted was reduced very materially; and although small in number, the Class ranks high in medical achievement.

This was recognized by the committee in charge of the celebration, and six months before Alumni Day the members met to consider a plan for the event. The first consideration was the publication of a Class-book; and this should be carried out by a capable and very persevering editor who sent to each member a comprehensive questionnaire to fill in about his internship, practice, appointments to hospitals and schools, studies and publications, services in the wars. Each man was also asked to relate the lives of his family and his special interests and hobbies.

Our first event was the gathering of the Class at the School for lunch on Alumni Day; and Amsden, Bry-

ant, Burnett, Lee, MacLeod, Merrill, Pratt, Reed, Shattuck, Talbot and Van Voast were present to participate at a special table. A highlight in the events was to have President Pusey join us and not only accept with pleasure an honorary membership in the Class but also to be in a photograph of the Class taken in the Faculty Room after lunch. In the afternoon, the members enjoyed a sociable time at Roger Lee's home; and this was attended by Dean Berry, former Dean Burwell and Pratt and Wendell of the secretarial staff. Later, the members went to George Shattuck's magnificent place in Brookline. George took us about his grounds to see many handsome and unusual trees, shrubs and flowers. Later in the house we sat down very informally and happily to a very delicious dinner. In the evening, Fritz Talbot entertained and interested us by a talk with colored lantern slides of beautiful scenes from a trip he and his wife took through



*Fritz Talbot and Roger Lee,  
both of 1905*

Spain and Portugal recently; and thus a very noteworthy and enjoyable reunion of H.M.S.'s Fiftieth ended.

FRANCIS L. BURNETT  
NATHANIEL W. FAXON  
ROGER I. LEE  
CARLISLE REED  
GEORGE C. SHATTUCK

*50th Reunion Committee*



*1905*

## FORTY-FIFTH REUNION

The Class of 1910 gathered for their 45th Reunion on May 27, 1955. They joined the many other classes at the excellent luncheon in the quadrangle of the Medical School. They greeted old and new friends there. After the lunch, some members visited the classrooms and laboratories, and some joined Dr. and Mrs. Gamble for tea in their garden.

In the evening the group met at the Harvard Club for a dinner. Dean Berry joined us to greet the class and get acquainted with the far-away Alumni. After the meal we were happy to hear from those classmates who had been long and far away.

We all agreed to meet again in 1960.

HENRY C. MARBLE  
*Reunion Chairman*

## FORTIETH REUNION

On the evening of May 27, 16 members of the class and 12 wives assembled at the Harvard Club for cocktails and dinner at 6:30 p.m. Earlier in the day, 12 classmates had attended the Alumni symposium and buffet luncheon at the Medical School, while the ladies enjoyed a very pleasant luncheon party at the Toll House in Whitman, Massachusetts. In the afternoon, several classmates visited the museums and hospital laboratories while renewing old friendships and contacts.

At the evening party, we were particularly honored by having Dean Berry of the Medical School as our guest. He gave us much interesting and pertinent information about the administrative procedure, the selection of students, and the teaching programs of the present day Medical School. Many old photographs and bulletin clippings revived pleasant memories of the 25th and 35th reunions, and a brief interval of silence and respect was observed for 38 classmates who have passed away since our graduation 40 years ago. Members of the class and wives present included: Dr. Edward B. Allen of New York City; Dr. and Mrs. Arlie Bock of Cambridge, Massachusetts; Dr. Percy Brown of Barre; Dr. and Mrs. H. C. Bumpus of Duxbury; Dr. and Mrs. Samuel Cline of Newton; Dr. and Mrs. Edward Cummings of Washington, D. C.; Dr. and Mrs. John Downing



1910

of Newton; Dr. and Mrs. Leon S. Gilpatrick of Spokane, Washington; Dr. and Mrs. Francis T. H'Doubler of Springfield, Missouri; Dr. Arthur Jackson of Winchester; Dr. and Mrs. Meredith Mallory of Orlando, Florida; Dr. and Mrs. Donald J. MacPherson of Newton; Dr. and Mrs. Fabyan Packard of Winchester; Dr. and Mrs. Horace K. Sowles of Falmouth, Maine; Dr. and Mrs. Langdon Thaxter of Portland, Maine; Dr. and Mrs. George W. Van Gorder of Newton.

FABYAN PACKARD  
*Reunion Reporter*

The high spot of the reunion was the talks after dinner. Pete Churchill renewed one's faith in young America abroad and Father Otis Kelly, who left our ranks for the Priesthood, convinced us that in becoming a Priest he remains as good a doctor as any of us.

RICHARD C. TEFFT  
*Reunion Chairman*

## THIRTIETH REUNION

Friday, May 27, found some 35-odd members of the Class of 1925 assembled bright and early for the 30th Reunion. We met with the Alumni Association in the amphitheater of Building E at 9 o'clock to hear interesting talks by Doctors Aub, Farnsworth, Gross, Enders, Weller and Garland. Dean Berry and President Pusey also greeted the Alumni. It is heartening for the Alumni, particularly those from distant ports, to see the Dean and the President, and certainly represents a contrast to our own days in School when the Dean rarely put in an appearance, and the President, never. Dr. Castle presided over the morning session and enlivened us with such quotes as "an expert is a man who tells you a simple thing in a confused way in such a fashion as to make you think the confusion is your own fault."

Well, there was no confusion of

## THIRTY-FIFTH REUNION

The Class of 1920 held their 35th reunion at the Medical School on May 26th and May 27th with a dinner at The Country Club. Twenty-two members of the class were able to make the reunion, fourteen of whom brought their wives. In attendance were Maurice Adelman, C. W. Alexander, Edward D. Churchill, Gerald Doherty, Elliott T. Denny, Jim Evans, C. Gamble, D. D. Greene, Gerry Hoeffel, Otis Kelly, Cliff Lanman, Ben Landry, Bob Leach, Joe Looney, Charles Lund, Harlan Newton, Ev O'Neil, Dick Smith, Raymond Stillman, Dick Tefft, Roy Wheeler, and Sid Wiggins.



Clifford Lamar and Charles Lund of 1920 chat with Dorothy Murphy





*Elliott Denny and Edward Churchill, 1920*

the experts who served luncheon Friday noon to a large number of the faithful outdoors after the morning meeting was completed. We communed not only with our own classmates but others who were in School with us and many of our teachers. The afternoon was free for entertainment of our own choice. In the evening we held our banquet at the Brae Burn Country Club at Newton, thanks to the courtesy and intercession of Henry Hudson. Hudson, Palmer, Saunders, Holzman, Weiss, Tenney, Cooper, Swan, Speare, Masaniso, Ingraham, Hemsath, both Lintons, Pearse, Millikin, Tiede, Weille, Schneck, Erwin Miller, Faxon, Patterson, May, Baty, Rogers, Sloan, Powers, Maddock, Kyle, Twinem, Morrill, McCrum, Pike, your secretary and many of our better halves plus one daughter (my own) made up the 58 who assembled around the dinner table. Our President, George Saunders, assisted by Cob Palmer and the secretary, called on every member present for a speech. In one instance a song was substituted for an after-dinner talk. Steve Maddock led the congregation in community singing. Cob Palmer, who has managed things from the Boston end of the line, said as follows: "My friends, you may not be as familiar as I am with the fact that 34 years ago we numbered exactly 3,325 classmates of which there now remain \$102 who contributed no less than 58 cocktails up to the beginning of this dinner.

Furthermore, if the Alumni Office laid the remainder it would fill every hold on the Brae Burn Golf Course and if each of us pledged annually one old Tom Lanman on the rocks we could contribute 5,000 classmates each year until we celebrate our 50th in 1975 of whom all could be as proud as I am to be one of which to fill the empty old swimming school to overflowing and give to each pregnant male grandchild one candied deanberry on a golden skewer."

This report was accepted with enthusiastic disclaim. It was voted to ask Bill Wishard to send each classmate a statement of the School's needs and what is reasonably expected of our Class. Each will do what he can, mindful of the ones who are gone and the ones whose circumstances do not permit annual giving. Your secretary's daughter, aged 15, was elected Colonel of the Class of '25, and a suggestion was made by Cob that if some of the rest of you will bring daughters in 1960 the precedent should be continued.

We list among the departed, the following: Blooser, Campbell, Carver, Convery, Crumrine, Max Davis, Dickinson, Dye, Church, Franklin, Ghrist, Johnson, Kelley, King, Kirkwood, Lamson, Reichbaum, Rhees, Roberts, Salter, Simpson, Townsend, Weaver, Yang, and Wang. A moment of silence was held at the banquet in honor and remembrance of these classmates.



*Howard F. Root, '19, and Samuel Levine, '14*

The meeting closed with a rising vote of tribute to Henry Hudson, Bob Linton, Cob Palmer, George Saunders, Ben Tenney, and other Boston members of our class and their wives who worked so hard to make this reunion a grand success. Special thanks go to Cob and Edith Palmer and Bob and Emma Linton to whom we are all grateful.

Saturday the 28th saw some of us back at the Medical School for Class Day, an exercise familiar to those of you who have attended the recent reunions. Now, for those of you who did not return—start bending every effort for 1960 and see what a grand time you can have. If the present death rate continues, our last surviving member will hold his solitary reunion in the year 2057!

BILL WISHARD  
*Secretary*



1930



*Raymond Militzer and  
Harold Hamilton, 1930*

## TWENTY-FIFTH REUNION

The Class of 1930 held a most satisfactory reunion on Thursday, May 26 and Friday, May 27. Activities began with registration in Gene Ep-pinger's office at the Medical School on Thursday afternoon, May 26, and festivities reached their full swing at The Country Club in Brookline that evening when 129 (60 couples and nine single classmates) attended a cocktail party and dinner dance with Ruby Newman's orchestra furnishing the music.

We found to our surprise that most recognized each other quite readily, in general discovering little change in terms of weight (gain or loss) and despite some greying or loss of top cover, and all seemed to take over where we had left off in June of 1930.

On the following morning we participated in and enjoyed a most stimulating symposium at the Medical School, followed by a luncheon in the quadrangle. Many classmates who had not attended this function in the past were highly gratified with the extraordinary quality of the symposium presentations and planned to make this an annual "must" for future years.

On the evening of Friday, May 27th, a cocktail party was held with Dorothy Murphy as our guest to renew our acquaintance with the administrative side of the School. This

was followed by a dinner, both at Kresge Hall of the Harvard Business School—latest of Harvard's dining halls. The efficiency and the hospitality of the Business School dining hall staff under Miss Fenno provided an excellent dinner in lovely surroundings overlooking the Charles River and Harvard College.

After dinner, buses took the 58 wives present to Symphony Hall for a Pops Concert while the class members relaxed informally in the Faculty Lounge. Here "Hammy" Hamilton did an incomparably good job as master of ceremonies, and for over two hours introduced impromptu speakers from those present. Where he got and how he remembered his vast store of amusing anecdotes and personal reminiscences about the class members is his secret. I hope he will let us in on it some day.

Among the 70 class members were Joe Reynolds from Los Angeles, Stamford from Tucson, Arizona, Sweet from San Antonio, Texas, Clyde Foshee from Louisville, Kentucky, and Arthur Berry from Georgia—to name just a few of those who came the furthest distance. Jack Caughey, Dean at Western Reserve Medical School, had interesting things to say in comparing us as medical students with our modern counterparts. Logan Roots, only recently returned from China, gave us



*Joseph Aub, '14 and  
Arthur Hertig, '30*

some fascinating insights into the difficulties and dangers he had encountered there. One of the high points of the evening was the presentation, somewhat belatedly (25 years in arrears) to Lou Strayer of his diploma. Apparently it had been resting, gathering some dust, in the safe at the Medical School all of this time because for some unaccountable reason he had not collected it. He received it after dinner amid general applause and approbation of the members of the class.

Lee Kendall, unchanged and as engaging as ever, surprised and gratified your president in presenting to him the gift of a lovely silver pitcher from the class in appreciation of his efforts in arranging the reunion.

It was a most successful occasion, great fun from this end to arrange, with the opportunity to communicate and later to renew friendships with so many classmates. A very special vote of thanks is due to the large group of local wives of class members, whose invaluable help in arranging for flowers, for transportation, for the concert, and for registration helped make the reunion such a great success. We look forward to seeing all of those of you who were here, and indeed all of those of you who were not here, back in Boston at the very earliest occasion.

ALFRED O. LUDWIG  
Class President



*Lee Kendall, '30 and Dorothy  
Murphy at lunch*



## TWENTIETH REUNION

To go or not to go? That was the question all spring. In the month of May, 1955, H.M.S. 1935 can be proud of the showing it made. Seventy strong, including wives, attended some function or other, and never before has a class twenty years out returned in like numbers. A touch of sentimentality lurks in all of us, and this became evident after twenty years of sloughing off appeals to contribute and pleas to attend. Indeed, it would take a flinty soul not to be stirred by Dr. Joe Garland's salty speech of Friday, or Dean Berry's well chosen, off the cuff remarks of Saturday, or meeting an old friend all the way from Colorado Springs, Los Angeles, or Chapel Hill for the express purpose of a reconnaissance with you and other classmates.



*Alfred Ludwig, '30 and  
Edward Curnen, '35*

Up until late May of 1955, we had been a shy and disjointed lot. On the twenty-sixth, no fewer than 57 appeared at Mary and Bimi Soutter's commodious quarters for buffet supper and camaraderie, and on the following evening essentially the same group of 57 drank, dined, and danced at the comfortable Weston Golf Club.

Sandwiched between was a morning of speeches in Building E by several faculty members, followed by the usual extremely pleasant under-the-tent luncheon in the School quadrangle. No cook's tour



*Mitchell Rabkin, '55,  
delivering the Class History*

was ours. During the afternoon, everyone did as they pleased until an early cocktail hour at the home of John Norcross in Wellesley and the home of Joe Holmes in Weston.

On Saturday morning the graduating class had its day. They looked like a group of brighties, fit successors of ours. More prizes were offered than students available to receive them. We were comforted to learn from the Dean that none of these prizes were existent in our day; and all of us returned to our burrows stimulated, and convinced that the Harvard Medical School continues to serve in the highest traditions and warrants continued interest and support. Let's all check back in 1960!

GORDON A. DONALDSON  
*Reunion Chairman*

## FIFTEENTH REUNION

On May 27th the Class of 1940 held its fifteenth reunion at the Essex County Club in Manchester. In order to avoid strenuous and wholesome outdoor activity the meeting was called for 5:30 p.m. on a gloriously dull and chilly afternoon. The brisk, salt air quickly drove everyone indoors, but had no noticeably dampening effect upon the 37 members (and 32 wives) who turned up. The numbers are approximate since informality was the keynote of the evening and only the crudest of records were kept.

It was early noted that the majority of the members of the class were well-developed and nourished and in no acute distress. As the evening progressed, they gradually went uphill and the gathering finally dispersed in the late—but not too late—hours. The reunion program was centered about dinner and there were few speeches. What speeches there were, were of remarkable quality. One might have said that they represented the distilled experience of fifteen years. Meigs commented upon the nobility of the class and after pertinent remarks by Chandler and Palmer, Weller spoke briefly and vividly about certain experiences in Sweden. No other volunteers could be prevailed upon to speak.

Bosher merits the distinction of having travelled farthest to come to



1940





Thomas Weller, '40, and  
John Snyder, '35

the reunion—all the way from Richmond. Of the out-of-state contingent were Clement from Buffalo and Milard from Rochester, the Meigs and Flecks from New Haven, the Bergers from New Britain, Sturgis from New York, the Seigles from Hartford, and the Perrys and Zolmians from Providence. The rest of the company were fairly local, that is from east of the Connecticut Valley.

The reunion disbanded with keen anticipation of another in another five years.

1940 Reunion Committee

## TENTH REUNION

(with apologies to the *New Yorker* magazine's man Stanley)

Arrived Building A 8:45 AM, Friday, May 27. Many registrars (attractive, young), few registrants. Established small greeting area. 9:00, Stewart walks in, bald, friendly, energetic. 9:01, Hinckley rolls in, friendly. 9:02, Fowler, Hoar, McNaughton, Uhl arrive in rapid succession. Reminiscences exchanged. 9:15, search party sent to look for Building E. '45 bivouac in last row, rapidly reenforced by Kiley, Bullard (sporting vermilion cap), Vaughan, Susen, Hagen, Thaler, Macdonald. Fitzpatrick seated below with local professors. Fine speeches by Nobel Laureates and other members of our

distinguished faculty. 12:30, cold beer and chicken salad in tent on quadrangle. Food delicious, spectacle eye-filling. Many thanks to Alumni Office. 2:30, arrived in Concord. Promptly spotted Bullard's vermilion cap, now on Schenk. Schenk on first tee. Bullard and Millers close behind, swinging clubs. 2:45, Hinckley vs Vaughan in fine tennis duel. 3:30, soft ball and beer in earnest. Thaler natural athlete, homering repeatedly. McKinney only slightly behind. Steve outglittered by Polly Royce both afield and abat. Very decorative. Rest of class arriving in droves. 4:30, Billy Peete in by plane, all the way from London. 6:00, bar open, very popular. 7:45, class picture (see above). 8:00, dinner and speeches. Nostalgia and whimsy from McKinney in Davy Crockett hat. Ike in tender adieu, off for Little America with Byrd. Read telegram to Hawk at Warm Springs: "Cricket is here in your place. We love her (here leaned down to kiss Cricket), but we wish you were here." Rendition by Pearl of new Poem, "Starting General Practice on the North Shore", with gay refrain running "no calls at all, no calls at all, a very small practice and no calls at all." Applause deafening. Barber-shop Quartette (Somerville, Morgan, Stewart, Fontneau, and two newcomers, Friedman and McKinney) sang those old favorites, *George Jones*, and *Graceful and Easy*. Read

financial report from Alumni Office: '45 first reunion class ever to have check bounce (two). Gay dancing 'till midnight. Unidentified stragglers ejected by management at 2:00 AM. Overslept Saturday, too late for Class Day. Drove to North Shore, losing way many times. Chuck Weed charming host, poor cartographer. 2:00 PM, beginning of clambake at Singing Beach. 3:00, classmates beginning to arrive. Impressive younger contingent led by pretty Judy Weed, class baby. Clams, lobster, hamburg, and beer in large quantities all afternoon. Fine clambake. 4:00, Harvey late arrival from New York. Quick, icy swims for Harvey, McKinney, Calkins; more beer for the not-so-brave. Baseball again, many foul balls into Atlantic. 4:30, decamping. Final grand tally: 41 men; 30 wives (and/or dates); empty children; sore muscles and painful burns; wonderful time for all.

JOHN P. BUNKER, Co-chairman  
1945 Reunion Committee

## FIFTH REUNION

Thirty-four percent of the class turned out for the reunion dinner at the Somerset Hotel on May 26th. That meant thirty-eight notables, enough to make quite a ball. The fellow in the white dress jacket turned out to be Don Gair and not



HARVARD MEDICAL SCHOOL, CLASS OF 1945, 10th REUNION - MAY 27th, 1955

1945



1950

the headwaiter, and he did a spectacular job as toastmaster. The meal was actually very good; entertainment was provided for the occasion by an Okie named Hannas, who parked his Lincoln in the lounge, stomped on the tables, kissed all the girlies, and generally made us all feel we'd forgotten how to live. After drinking and eating, we turned back to drinking while Don did some thumbnail analyses of those present. Special mention should go to a few: mostly to Walt Wilder who traveled from Minnesota where he's about to practice pediatrics, and to R<sup>2</sup> Hannas who came up from Oklahoma, with the missus. Clifton and Shields came up from New Hampshire and Maine respectively, and reported that life is good to them. Dave Frank arrived from Bridgeport without his gastroscope but with his family. Tom Hayes staggered in a bit late and strode out early. He has five children. Bill McNeeley sat back and enjoyed it all because he had arranged the dinner. Mahoney and Goldblatt talked quietly about their experiences as residents on loan to Sun Valley. Evelyn Davies Waitzkin was our only ladylike representative, and she turned out to be busied at home with her own pediatric department. A sheaf of letters (4) from absentees were read: Williams and Hollander apparently well-situated in Chapel Hill; Broadway happy as a clam about a good new

job at the University of Miami; Terry Moore about to leave Detroit for Pittsburgh (!); and Dick Allen finishing up at Henry Ford. After a graphic description from Glimcher about how to act in the witness chair we broke up and went home.

Activities continued after lunch on Friday with an outing at a camp near Lexington. The beach idea was abandoned when we discovered that the place selected was practically

under water half of the time. At any rate, 20 strong young men and fifteen of their lovely overworked wives (plus one brave girl with Goldblatt) all agreed with their hordes of children that the party was a success, and that the other 110 members should have come. The weather wasn't exactly perfect, but there was swimming, baseball, and general hell-raising until dark. Bert Kriete had arranged the food with the consummate skill of one trained in internal medicine. Achenbach tried to klobber one of his kids and tipped over the coffee, for which he got a door prize of a half bottle of Zallen's dill pickles. Most all the families took home some valuable memento, such as mayonnaise, egg salad, (one pint) and dry ice chips. We got a pile of new paper plates, which if laid end to end would take up so much room that we keep them stacked up.

The consensus was that 1) Harvard Medical School was a good thing and worth supporting and 2) that the tenth should find us all able to call the shots and show up.

W. BRADFORD PATTERSON  
*Reunion Chairman*



*Francis H'Doubler, '15, and son Peter, '55 get together with Stephen Hedberg, '55, and father Herbert, '29*





Processional—the Faculty arrives

# Class Day

*Photos by Walter Fleischer*

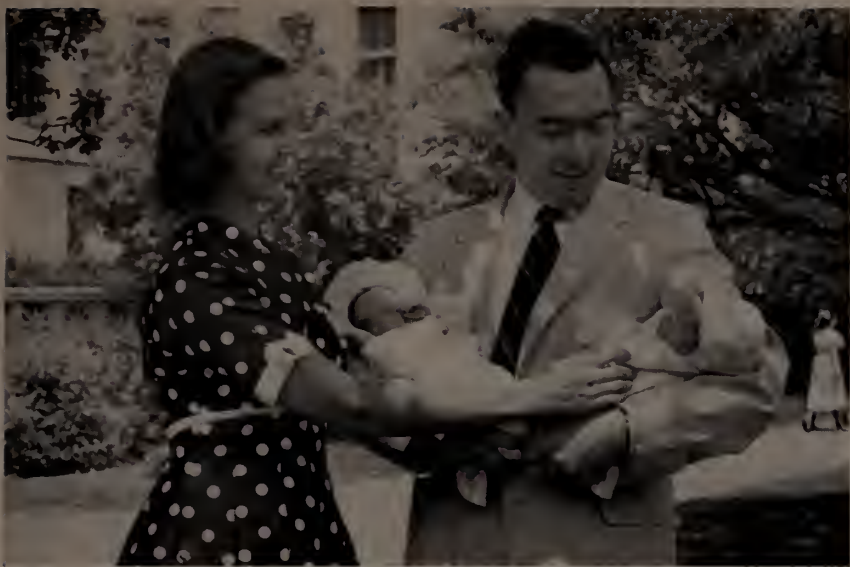


Monarch of all he surveys



"I can't understand  
how you can *ever*  
get a picture  
with this thing!"





Mrs. Sidlee Leeper,  
Sidlee Leeper, '55,  
and twin Leepers

Lee Kendall, '30, presents  
the Alumni Prize to  
Roman DeSanctis, '55



June Pryor, '55, and daughter Linda



Quo vadis? . . . the Class Day Address





# Inside H. M. S.

## 1955 CLASS HISTORY ADDRESS

Mitchell T. Rabkin, '55

Dr. Berry, Members of the Faculty, Distinguished Guests and Fellow Students, I thank you for the honor which you have graciously bestowed by choosing me as the Class Speaker.

In the recent past, the Class History address has followed a singular pattern, presenting as a medical review. Since tradition plays so important a part in a great university, I found myself considering similar topics, such as "H.M.S. '55—a case history in the development of medical jaundice," or perhaps more introspective, "Class of 1955—pre malignant or just atypical?" I think, though, it would be happier to go beyond the saga of first-year spasticity progressing to an inevitable flaccidity by the end of the fourth, for each class is said to have a personality of its own, and many conjectures are made as to the dynamics of this individuation. Starting as a gawky youth with untrammelled enthusiasm, we evolve in four years into *the Class of 1955*. Ours is reputedly a quiet class, less eccentric than most, but with deep and hidden rumblings. Should one dare to wonder how we got that way?

With apologies then to Dr. Freud, and to Dr. Hendrick, from whose book I quote most disgracefully out of context, we proceed to unveil the psychodynamics of the development of H.M.S. '55.

To beget a personality, one must have something to work with, and our primitive organism in question collected one sunny September four years ago. It was apparent that the job would be difficult, for the infant was not totally undifferentiated, but rather bifid. The lines were clear—one was either from "The College" or not. It was an inauspicious start for development. One side eyed the grey flannels and green bookbags of the other and thumbed through the catalogue, reassuring themselves that this was indeed Harvard Medical School and not mortuary college. The other beat a hasty retreat to Cambridge, considering it imperative to maintain a grasp

on reality—reality being defined as that area within hearing range of the Memorial Church bell. The battle between these factions soon became subtle, but the flags of the opposing camps flew each day at breakfast. It was *New York Times* vs. the *Boston Herald* and an assortment of Hometown Gazettes. The burning question was, would *no* development be made by the class as a whole? Fortunately it was discovered by "The College" faction that in the *Boston Herald* existed a lay analyst who could bring together our two extremes. His name was Pogo, and his role of therapist must be mentioned.

The first period in our life was devoted to the development of the Id. This is the ultimate source of all impulses to think or to act. These impulses are originally independent of each other and are classically listed as anatomy, physiology, biochemistry and the rest of the basic sciences. Dr. Hendrick comments that these impulses are not organized in a temporal way, nor are they dependent upon real opportunities for expression. We were forced to create our own means of expression—upon each other in cold rooms, on treadmills, amidst the vapor of unhealthy gases, and in large bottles furtively transported from Vanderbilt Hall into the security of Building C. We were told that this Id was the source of energy which produced the visible effects of being a doctor. We were not told but soon found out that the most striking characteristic of the Id is its subordination to the Pleasure Principle. The awareness of this reached its height in the spring of our second year during the balmy afternoons when we should have been in Laboratory Diagnosis. The Pleasure Principle has stoutly maintained itself ever since, although it has become increasingly sophisticated. So much for the basic sciences, the agencies which form the Id impulses.

Early in life, the child's experience leads to a differentiation of perceptions of himself and his world. The Ego develops as those elements of personality responsible for perceiving, knowing and doing. Toward the



end of the second year, we began Physical Diagnosis, the preliminary Ego-building course. We were supported in the feeling of having arrived by obtaining black leather bags of fantastically excessive size and wandering through the wards for the first time. Now, the functions of the Ego are muchly those which distinguish man from the animal, and we were quick to grasp the difference. This perspective was undoubtedly heightened by the appearance of the now classic article by Bulfinch on "Roundsmanship." It was an era of devoted attention to journals which were either remote—such as the Yokohama Medical Bulletin—or rather circumspect—such as the South African Journal of Fantastic Diseases.

It was out of this chaos, out of this inseparable intermingling of intellectuality and pedantry, that the Ego began to mature. We were still rather diffuse in the third year clinical work but, with the exuberance of youth, we became an "*enfant terrible*." They said, "You must think of the patient as a whole," and we did. We tried to convince the visit on surgery that the triangle of Oedipus was a better landmark than the triangle of Hesselbach. Workups increased in size as rapidly as we grew, containing more facts than most biographies. It was said that some workups, if laid end to end, would reach from the Earth to Neptune. Knowledge was increasing, perception getting sharper, but there was no over-all scheme of internal authority and prohibition. One of the scholars in the class likened us to the Minotaur of classical mythology which Theseus slew—half human and half bull.

Of course there had been some restraint on the part of the class in dealing with its primitive impulses, but the dynamics of this control centered about fear of external agencies—muchly the Dean's Office. For a truly mature H.M.S. '55, what was needed was a system of control by authorities who were a function of our personality itself—i.e., a Super-Ego. The first budding of Super-Ego was nurtured in Preventive Medicine, where we were given parodies on medical literature and told to exercise our new-found judgment on them. It was stimulating, but the Super-Ego was not yet fully ripe and the role of external authority had to be re-emphasized at the end of our third year. It was a sorry group, including H.M.S. '55 and its older brother '54, which was accused of infantile regression, while the smoke of charred furniture still hovered over the Vanderbilt Hall tennis court. Fortunately, our part in the affair was regarded as sibling rivalry and we were dismissed with a tender chuck under the chin and a simple warning.

That this warning was well heeded bears some witness to the growth of Super-Ego. However, this agency operates in other, more medical spheres as well. As it developed, we learned that there was no such thing as a classical case, that patients were human and that doctors should be human too. Perhaps the best sign of

maturity was the phenomenon of H.M.S. '55—fourth year striker, with its concomitant power and authority. It may be said to the credit of our class that this power was not misused—that there are no unnecessary aspirins, no unwarranted tap water compresses, no homeopathic enemas in the order books to blemish our name.

It became apparent that we soon would be weaned and great preparations were made. There was a round of conferences as to disposal of H.M.S. '55 and it was quickly decided that while growth and development had taken place at a rate satisfactory to permit discharge from Shattuck Street, further institutionalization would be necessary. The old topic of Boston vs. "outside" hospitals was debated, and after much individual thought and consideration, H.M.S. '55 was placed in a gigantic IBM machine. When the wheels stopped turning, we saw with some apprehension that H.M.S. '55 was rent asunder, to be scattered throughout the country.

There were still a few more months to go, however, and these were devoted to creating a glossy finish to the finer points of our personality. After all, though geographically spread out, we were to be Genus Harvard Med, species 1955, and recognizable as such. So the past few months have been spent muchly in collecting and organizing the reprints of our faculty's publications, of jotting down the *right* way a procedure is done, such as *the* kidney workup, *à la* Brigham. The ghost of Bulfinch appeared again as we practiced raising an eyebrow discreetly and remarking in modulated tones, "But my dear sir, in this case the serum caeruloplasmin A-V difference is indispensable," or, if perchance this chemistry has been recorded, "Well, doctor, I feel that if you look at the patient well enough, you wouldn't need these laboratory crutches."

This, perhaps, is a more superficial facet of H.M.S. '55, the new medical personality. There is something deeper that unifies it as it wanders off to its various fortunes, something we have already mentioned—that is, the concept of growth and maturity. This is probably what makes any H.M.S. class a real personality. We begin the process by memorizing the facts and later extending them into physiological principles. These principles of physiology—both normal and abnormal—become more and more important and the isolated facts less so.

By the end of four years, we are said to know more principles and less facts than any other medical students in the world. I wonder if this is not a corollary of President Lowell's explanation of the greatness of Harvard—that the freshmen arrive knowing a little, but the seniors leave knowing less, and by this process the University accumulates knowledge bit by bit. And yet, we can now leave Harvard Medical School with the confident feeling that we shall become sound physicians, that we have much growth to look forward to, that we have been nurtured on the best pabulum available, and for this, we may be thankful.

Such is the Class History of H.M.S. '55.



# INTERNSHIPS, CLASS OF 1955

Unless otherwise noted all *internships* start July 1, 1955 for one year.

<i>Name</i>	<i>Hospital (and location)</i>	<i>Service</i>
Abrahamis, David	Peter Bent Brigham, Boston	Medical
Adelson, William J.	Syracuse Medical Center	Rotating
Alexanian, Raymond	King County, Seattle	Rotating
Allen, John D.	King County, Seattle	Medical
Atwater, Edward C.	Strong Memorial-Rochester Municipal	Medical
Austen, William G.	Massachusetts General, Boston	Surgical
Batchelder, Wendell W.	North Carolina Memorial, Chapel Hill	Medical
Bauer, Lester E.	University, Ann Arbor, Mich.	Rotating
Becker, David J.	Duke, Durham, N.C.	Medical
Bennett, David W.	Grady Memorial, Atlanta, Ga.	Medical
Blinks, John R.	Peter Bent Brigham, Boston	Medical
Bolman, William M.	Bellevue, New York	Pediatrics
Boyer, Georgiana S. (Mrs.)	Research, Cleveland	
Boyer, John T.	University Hosps., Cleveland	Medical
Brooks, Robert A.	Salt Lake County General	Medical
Brownsberger, Carl N.	Boston City (Harvard Service)	Medical
Buckingham, S. Sue (Miss)	Beth Israel, Boston	Medical
Burg, Maurice B.	Beth Israel, Boston	Medical
Cahill, Charles A., 3d	North Carolina Memorial, Chapel Hill	Medical
Carleton, Richard A.	Boston City (Harvard Service)	Medical
Carpenter, Allan F.	U. of California, San Francisco	Medical
Chobanian, Aram V.	Massachusetts Memorial, Boston	Medical
Clement, S. Preston, Jr.	Massachusetts General, Boston	Medical
Cobb, George E.	Johns Hopkins, Baltimore	Surgical
Daniel, Thomas M.	University Hosps., Cleveland	Medical
Davis, Edgar F.	Mary Fletcher, Burlington, Vt.	Rotating
Decker, John B.	Bellevue (II Div.), New York	Medical
Deikman, Arthur J.	Philadelphia General	Rotating
Demissianos, Harry V.	Peter Bent Brigham, Boston	Surgical
DeSanctis, Roman W.	Massachusetts General, Boston	Medical
Dettman, Harold J.	Columbia, Milwaukee, Wis.	Rotating
Dietlein, Lawrence F., Jr.	Boston City (Harvard Service)	Medical
Dobos, Joseph K.	Roosevelt, New York	Mixed
Edwards, Leon C.	Research, Boston	
Ehrlich, Fred	Salt Lake County General	Rotating
Feldman, Martin P.	Strong Memorial-Rochester Municipal	Surgical
Fieve, Ronald R.	Bellevue (I Div.), New York	Mixed
Fife, James L.	Boston City (V Service)	Surgical
Fischer, David S.	Kings County, Brooklyn	Medical
Flerlage, Stuart Q., Jr.	Cleveland City	Rotating
Fletcher, William S.	Boston City (V Service)	Surgical
Forbes, Vassilike Cecile (Mrs.)	Massachusetts General, Boston	Pediatrics
Friedman, Leonard J.	Massachusetts General, Boston	Medical
Gabuzda, Thomas G.	Massachusetts General, Boston	Medical
Garrett, William S., Jr.	University Hosps., Cleveland	Surgical
Geist, Howard J.	Barnes, St. Louis	Surgical
Gettes, Norton I.	Beth Israel, Boston	Surgical
Glass, MacEllis K.	Mount Sinai, New York	Surgical
Goldberg, Robert C.	Beth Israel, Boston	Medical
Goldstone, Jonas M.	Boston City (Harvard Service)	Medical
Goodman, DeWitt S.	Presbyterian, New York	Medical
Grant, Lester H.	Grace-New Haven Community	Medical
Greenberg, Harold L.	Beth Israel, Boston	Surgical
Greene, James A.	University, Ann Arbor, Mich.	Rotating
Grinspoon, Lester	Beth Israel, Boston	Medical
Gunderson, Alf E.	Massachusetts General, Boston	Surgical
Gurewich, Victor	Beth Israel, Boston	Medical
Hardman, Robert P.	Cleveland City	Rotating
Harper, George L.	U.S. Public Health, San Francisco	Rotating
Harris, Alvin H.	University Hosps., Cleveland	Surgical
Hayes, Barbara W. (Mrs.)	Minneapolis General	Rotating
H'Doubler, Peter B.	Peter Bent Brigham, Boston	Surgical
Hedberg, Stephen E.	Massachusetts General, Boston	Surgical
Heine, Earle R.	Harper, Detroit	Rotating
Heising, Ralph A.	U.S. Naval, Bethesda, Md.	Rotating
Hollingsworth, Gerald M.	Los Angeles County General	Rotating
Humiston, Karl E.	King County, Seattle	Rotating
Hyman, Harris, 3d	U. of Minnesota Hosps., Minneapolis	Medical
Isenberg, Philip L.	Boston City (Boston U. Service)	Medical

<i>Name</i>	<i>Hospital (and location)</i>	<i>Service</i>
Jankowich, Raymond E.	King County, Brooklyn	Rotating
Kahn, Richard J.	Massachusetts Memorial, Boston	Medical
Kaye, Bernard L.	Grace-New Haven Community	Surgical
Keevil, Charles S., Jr.	Massachusetts General, Boston	Medical
Kenigsberg, Reuben K.	Boston City (V Service)	Surgical
Kightlinger, Benjamin N.	University Hosps., Cleveland	Medical
Kliman, Bernard	Beth Israel, Boston	Medical
Laszlo, John	University Chicago Clinics	Rotating
Leeper, Sidlee W.	*University, Ann Arbor, Mich.	Rotating
Leigh, John E.	Minneapolis General	Rotating
Liebman, Jerome	University Hosps., Cleveland	Pediatrics
Loeb, Felix F., Jr.	U. of Illinois Research & Educational, Chicago	Rotating
Long, LeRoy	U. of Illinois Research & Educational, Chicago	Surgical
Lorentson, Carl E.	U. of Illinois Research & Educational, Chicago	Rotating
Lyons, John H., Jr.	Vanderbilt University, Nashville	Surgical
Mack, John E.	Massachusetts General, Boston	Medical
Malt, Ronald A.	Massachusetts General, Boston	Surgical
McAndrew, William E.	Philadelphia General	Rotating
McDevitt, Hugh O.	Peter Bent Brigham, Boston	Medical
Mehlman, Robert D.	Johns Hopkins, Baltimore	Medical (Pr. wds.)
Miller, Richard C.	University Hosps., Cleveland	Surgical
Moran, Walter H., Jr.	U. of Minnesota Hosps., Minneapolis	Surgical
Mullally, Daniel I.	St. Louis City	Medical
Muller, Herbert A., Jr.	Pennsylvania, Philadelphia	Rotating
Nakamura, Frances F. (Miss)	Johns Hopkins, Baltimore	Pediatrics
Nathan, David G.	Peter Bent Brigham, Boston	Medical
Nay, Leston B., Jr.	U.S. Army, Valley Forge, Penn.	Rotating
Norris, Forbes H., Jr.	Johns Hopkins, Baltimore	Surgical
Pallete, Edward M.	Roosevelt, New York	Mixed
Panzer, Gilbert R.	Bellevue (II Div.), New York	Medical
Parshall, William A.	King County, Seattle	Rotating
Parsons, Robert L.	Presbyterian, Chicago	Rotating
Picard, Ernest H.	Beth Israel, Boston	Medical
Pierce, James C.	Peter Bent Brigham, Boston	Surgical
Pittman, Constance S. (Mrs.)	Baltimore City Hosps.	Medical
Pollock, Donald O.	Mary Imogene Bassett, Cooperstown, N.Y.	Mixed
Prusky, Paul M.	Indiana U. Medical Center, Indianapolis	Rotating
Pryor, June W. (Mrs.)	Children's Medical Center, Boston	Pediatrics
Rabkin, Mitchell T.	Massachusetts General, Boston	Medical
Rand, Peter W.	Maine General, Portland	Rotating
Resnick, Robert H.	New England Center, Boston	Medical
Rickenbach, Howard F., Jr.	Pennsylvania, Philadelphia	Rotating
Rolett, Ellis L.	Massachusetts General, Boston	Medical
Sams, Bruce J., Jr.	North Carolina Memorial, Chapel Hill	Medical
Sanders, Jack S.	Kansas City General No. 1	Rotating
Sandler, Allan I.	Massachusetts General, Boston	Medical
Shore, Eleanor G. (Mrs.)	New England Center, Boston	Medical
Sirkin, Robert B.	Barnes, St. Louis	Surgical
Soltes, Maury	Boston City (V Service)	Surgical
Sperber, Robert J.	North Carolina Memorial, Chapel Hill	Medical
Stahl, Walter R.	U.S. Public Health Service, Staten Island	Rotating
Steinman, Paul A.	U.S. Air Force, Letterman Army, San Francisco	Rotating
Stemmer, August L.	Boston City (V Service)	Surgical
Stiles, Quentin R.	Massachusetts General, Boston	Surgical
Stubblefield, Howard L.	Los Angeles County General	Rotating
Summerall, Charles P., 3d	Massachusetts General, Boston	Medical
Thum, Lawrence C.	Stanford University Hosps., San Francisco	Medical
Urschel, Harold C.	Massachusetts General, Boston	Surgical
Viederman, Milton	Peter Bent Brigham, Boston	Medical
Villee, Dorothy B. (Mrs.)	Massachusetts General, Boston	Pediatrics
Waldmann, Thomas A.	Massachusetts General, Boston	Medical
Warren, Kenneth S.	Boston City (Harvard Service)	Medical
Waterman, Norton G.	Barnes, St. Louis	Surgical
Weiss, Harvey J.	Bellevue (I Div.), New York	Mixed
Weissman, Sherman M.	Boston City (Harvard Service)	Medical
Whitehill, Walden B.	Cook County, Chicago	Rotating
Woolston, Marian (Miss)	†Children's Medical Center, Boston	Pediatrics
Wyman, Edwin T., Jr.	St. Luke's, New York	Mixed
Yull, Arthur B.	Stanford University Hosps., San Francisco	Surgical
Zacks, Sumner I.	Massachusetts General, Boston	Pathology

\* two-year appointment

† January 1, 1956–December 31, 1956



COURSES FOR GRADUATES FOR THE ACADEMIC YEAR 1955-56

**PATHOLOGY OF OBSTETRICS AND GYNECOLOGY**

By Arthur T. Hertig, M.D., and Associates at the Free Hospital for Women, Thursdays, January 5–May 10, 1956

**PEDIATRICS**

By Allan M. Butler, M.D., and Associates at the Massachusetts General Hospital, one to eight months, October, 1955 through May, 1956

**PEDIATRICS**

By R. Cannon Eley, M.D., and Associates at the Children's Hospital, October 3, 1955–January 28, 1956 (Will be repeated February 6–May 25, 1956)

**INTERNAL MEDICINE**

By Laurence B. Ellis, M.D., and Associates at the Boston City Hospital, September 1–November 30, 1955 (Will be repeated June 4–August 31, 1956)

**CARDIOVASCULAR DISEASE**

By Edward F. Bland, M.D., and Associates at the Massachusetts General Hospital, October 3, 1955–September 29, 1956

**CARDIOLOGY**

By Louis Wolff, M.D., and Associates at the Beth Israel Hospital, January 30–May 6, 1956

**CARDIOLOGY**

By Laurence B. Ellis, M.D., and Associates at the Boston City Hospital, Wednesdays–November 2, 1955–January 18, 1956

**DIABETES AND ENDOCRINOLOGY IN RELATION TO GENERAL MEDICINE**

By Howard F. Root, M.D., and Associates at the New England Deaconess Hospital, October 10–12, 1955

**DERMATOLOGY AND SYPHILOLOGY**

By Chester N. Frazier, M.D., and Associates at the Massachusetts General Hospital, October 3, 1955–September 29, 1956

**GENERAL RADIOLOGY**

By Merrill C. Sosman, M.D. at the Peter Bent Brigham Hospital; by Laurence L. Robbins, M.D., and Milford D. Schulz, M.D., at the Massachusetts General Hospital; by Max Ritvo, M.D., at the Boston City Hospital; and by Edward B. D. Neuhauser, M.D., at the Children's Hospital. Monthly, throughout the year.

**GENERAL SURGERY**

By Edward D. Churchill, M.D., and Associates at the Massachusetts General Hospital, October 3–28, 1955 (Will be repeated May 14–June 8, 1956)

**GENERAL SURGERY**

By Edward D. Churchill, M.D., and Associates at the

Massachusetts General Hospital, three to twelve months throughout the year, by arrangement

**ORTHOPEDIC SURGERY**

By William T. Green, M.D., and Associates at the Children's Hospital, one to twelve months throughout the year, by arrangement

**ORTHOPEDIC SURGERY**

By Joseph S. Barr, M.D., and Associates at the Massachusetts General Hospital, three to twelve months throughout the year, by arrangement

**TREATMENT OF FRACTURES AND OTHER TRAUMATIC CONDITIONS**

By Edwin F. Cave, M.D., and Associates at the Massachusetts General Hospital, October 24–29, 1955

**CLINICAL OBSTETRICS**

By Crawford H. Hinman, M.D., and Associates at the Boston Lying-in Hospital, one month–October and November, 1955; April and May, 1956

**GYNECOLOGY**

By George V. Smith, M.D., and Associates at the Free Hospital for Women, one month–July, August, and September, 1955; and June, 1956

**GYNECOLOGY**

By Joe V. Meigs, M.D., and Associates at the Massachusetts General Hospital, September 12–23, 1955

**BASIC SCIENCES IN OPHTHALMOLOGY**

By Henry F. Allen, M.D., and Associates at the Harvard Medical School, September 26, 1955–January 20, 1956

**INTRODUCTION TO CLINICAL OPHTHALMOLOGY**

By Edwin B. Dunphy, M.D., and Associates at the Harvard Medical School and Massachusetts Eye and Ear Infirmary, January 23–March 3, 1956

**HISTOPATHOLOGY OF THE EAR, NOSE AND THROAT**

By LeRoy A. Schall, M.D., and Associates at the Harvard Medical School and Massachusetts Eye and Ear Infirmary, October 31–November 26, 1955

**ANATOMY OF THE HEAD AND NECK**

By LeRoy A. Schall, M.D., and Associates at the Harvard Medical School, November 28, 1955–January 28, 1956

**AUDIOLOGY**

By Moses H. Lurie, M.D., and Associates at the Harvard Medical School and Massachusetts Eye and Ear Infirmary, January 30–February 11, 1956

**ANATOMY OF THE TEMPORAL BONE**

By Moses H. Lurie, M.D., and Associates at the Harvard Medical School and Massachusetts Eye and Ear Infirmary, February 13–March 24, 1956

# HONORS

Dr. George P. Berry, Dean of the Harvard Medical School, has been awarded three honorary degrees at June ceremonies. On June 2, New York University, celebrating the dedication of its new Medical Science Building, conferred upon him an honorary D.Sc. In making the award, Dr. Homer Smith, Professor of Physiology, cited him as "largely responsible . . . for stimulating new interest in methods for the encouragement of medical learning." On June 12, he was awarded the honorary degree of Doctor of Science at the 105th annual commencement of the University of Rochester, where he served on the Faculty, and later as associate dean. On this occasion, Dr. Berry was cited for "the undiminished vigor (with which) he has brought fresh leadership to the national scene." "He has," said Dr. deKiewiet, President of the University, "undertaken a vital responsibility to the health of the nation, and discharged that responsibility well." On June 17 he was honored by Jefferson Medical College with a degree of Doctor of Humane Letters. In this presentation, he was described as "an outstanding authority in the field of medical education." The Jefferson award is particularly notable since this title is usually conferred upon those whose careers have been distinguished largely by accomplishments in the field of education.

Dr. Berry has emphasized that these degrees and the one awarded to him in 1954 by Harvard reflect the growing recognition of the Medical School's leadership in medical education. As Dean of the School, his receipt of these honors mirrors the esteem in which Harvard is held by its peers.

\* \* \* \*

Dr. George W. Thorn, Physician-in-Chief at the Peter Bent Brigham Hospital and Hersey Professor of Medicine in Harvard Medical School, has received the John Phillips Memorial Award for outstanding contribution to the progress of internal medicine, at the 36th annual session of the American College of Physicians in Philadelphia. The John Phillips Award was established in 1929 by the Board of Regents of the American College of Physicians to be given periodically for outstanding achievement. Dr. Thorn is the fifth Harvard Faculty member to receive the Award. Dr. Thorn was cited in the presentation of the Award for the major contributions made by him and his associates in the advancement of knowledge concerning the physiology of adrenal gland, the therapeutic uses of ACTH and cortisone, and, more recently, the physiologic and therapeutic implications of substituted compounds of hydrocortisone, as well as the sodium active steroid, aldosterone. On receiving the award, Dr. Thorn addressed the session on the subject of "Studies of Fluorohydrocortisone and Aldosterone."

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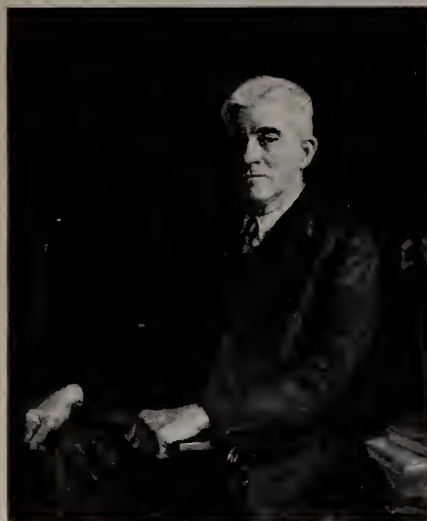
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## PORTRAIT OF PROFESSOR DRINKER

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On May 6, in the presence of a group of friends and former associates, a portrait of Professor Cecil K. Drinker, formerly Professor of Physiology in Harvard Medical School and the Harvard School of Public Health, was unveiled. Dr. Berry, acting on behalf of the School and the Corporation, expressed his pleasure that Professor Drinker's portrait should be hung next to that of his predecessor, Walter B. Cannon.

Dr. Landis, the present Professor of Physiology, then introduced Dr. James Gamble who recounted Dr. Drinker's many large gifts to the science of physiology. Dr. Gamble recalled for the audience his astonishment some years before when, on entering Dr. Drinker's laboratory, he was confronted with the unforgettable spectacle of a calf walking on one leg upside-down. This, he explained, was a mechanized exercise designed to facilitate Dr. Drinker's collection of lymph for one of his provocative studies. In closing, Dr. Gamble described his pleasure in reading Dr. Drinker's monograph "Clinical Physiology of the Lungs." "It was written," said Dr. Gamble, "on the shores of Buzzards Bay and has the clarity of a northwest day on the Cape. It is a masterpiece of exposition of intricate physiological performance. Morphology is usually taken as connoting lifeless structure, but this is dynamic morphology. It portrays the beauty of physiological design, not only its suitability for an assigned task, but its wide adjustabil-

ity in the presence of obstacles imposed by disease."

At the conclusion of Dr. Gamble's remarks, Dr. Landis unveiled the portrait and following this Dr. J. Howard Means recalled that Dr. Drinker's scholarship was manifest in everything he did, whether work or play. Said Dr. Means, "He made some of the most beautiful fishing rods for deep sea fishing that I have ever seen and imported woods from all over the world for this work, making experiments of their particular qualities. I remember at one time he even became interested in medieval cross bows, studying the whole history of cross bows and becoming quite expert in this field." The painter, Peter Pezzati, has included some of Dr. Drinker's interests in fishing and boating in the portrait. In closing Dr. Landis presented to Dr. and Mrs. Drinker a bound volume of letters and telegrams in greeting from friends and associates unable to be present. The ceremonies concluded, refreshments were served.

### GAY LECTURE

On Wednesday, April 27th, the Reverend George Arthur Buttrick, Plummer Professor of Christian Morals and Preacher to the University gave this year's George W. Gay Lecture upon Medical Ethics. His subject was "The Human Side of the Doctor's Work."

In 1917, Dr. Gay established a fund to support lectures "to the advanced, or graduating classes in the Medical School upon Medical Ethics, and upon wise and proper methods of conducting the business of physicians, as relates to fees, collections, investments, etc." Approximately thirty Gay lectures have been given, and their subject matter has reflected

the broad limits of the original definition. For the most part they have followed the inspirational tone set by Francis Peabody and his classic lecture "The Care of the Patient." In a time when "medical ethics" has become virtually synonymous with "Public Relations," the Gay lectures have stood for something more than enlightened self-interest.

George Washington Gay was born in New Hampshire in 1842. He entered the Harvard Medical School in 1864. During his final year at the Medical School, he was also Surgical House Officer at the Boston City Hospital. To both institutions, the Medical School and the City Hos-

pital, he rendered long and distinguished service, as Lecturer in Surgery and Visiting Surgeon. He was a pioneer in the then new field of antiseptic and aseptic surgery. Owing to a serious illness in his early fifties, Dr. Gay was forced to relinquish his active practice of surgery. In its place he devoted his energies to the welfare of his professional colleagues and their patients. He died in 1931, in his eighty-ninth year.

The Gay Lectureship perpetuates his care for the welfare of the patient and his appreciation of the constantly changing social forces and their impact on medicine.

J.G.S.











